# Company profiles

## ADAM AIRCRAFT INDUSTRIES

Adam Aircraft was founded by George F. Adam Jr. and John C. Knudsen at Centennial Airport in Arapahoe County, Colorado, USA in 1998. The company designs and manufactures aircraft for civil and government markets, using computer-aided design, rapid prototyping, advanced manufacturing techniques, and carbon composite materials. Adam's carbon fibre pressurised twin piston-engined centreline thrust Adam A500 has been type certified by the FAA. Its larger twinjet sister, the Adam A700 AdamJet falls into the Very Light Jets (VLJ) category.

Adam has over 80,000 square feet (7,430 square metres) of office and manufacturing space in Englewood, Colorado, 22,000 square feet (2,040 square metres) of manufacturing and testing space in Pueblo Colorado and 22,000 square feet at Assembly 2 in Ogden, Utah. In 2006 the company raised \$93m (€73m) through a private funding round led by US venture capital firm DCM. At the end of 2005 in conjunction with other partners, the company won a major contract from the US Defense Advanced Research Projects Agency for the development of a next-generation rotorcraft. CONTACT: Adam Aircraft Industries, 12876 East Adam Aircraft Circle, Englewood, C0 80112 US Web: www.adamaircraft.com

## AERION CORPORATION

Aerion Corporation is an advanced aeronautical engineering organisation headquartered in Reno, Nevada, USA. The company is focused on the commercialisation and development of new concepts in supersonic transportation.

Aerion has earned patents on several concepts related to supersonic aerodynamics and structures, including patents on a supersonic natural laminar flow wing design.

In addition to the Reno organization, Aerion includes an engineering group in Palo Alto, California specialising in advanced computational methods for flow analysis and design optimisation.

The company was set up to bring supersonic business aircraft to market it is headed by Robert Bass, president of Keystone, Inc. and the founder of the Oak Hill investment partnerships, as chairman. There is a strong team behind him. Brian Barents is vice chairman. He is the former CEO of Learjet and Galaxy Aerospace where he was responsible for the development and successful introduction of new-technology business jets. COO Michael Henderson was Boeing's chief project engineer for enabling technologies, and Richard Tracy, Chief Technology Director who developed the natural laminar flow supersonic wing, and conducted research on its capabilities privately and under subsequent DARPA grants. He has worked on both civil aircraft and defense programs, including the Global Hawk and the single-stage-to-orbit X-30. He led the initial design on the Learstar 600 for Bill Lear, later produced as the Canadair Challenger.

Aerion's business case is to seek a leading manufacturer(s) to build a consortium of suppliers to distribute the development and certification cost among the risk-sharing partners for its supersonic business jet (SBJ)

Contact: Aerion Corp.1325 Airmotive Way, Suite 370, Reno, NV 89502

www.aerioncorp.com

## AGUSTAWESTLAND

British and Italian partners GKN plc and Finmeccanica S.p.A merged their helicopter subsidiaries GKN-Westland Helicopters and Agusta to form Agusta/Westland, a 50/50 joint venture in 2001. Finmeccanica bought out GKNs stake in 2004 and now fully owns the company. Prior to the merger, Agusta and Westland had each been manufacturing helicopters for more than 50 years. The companies first collaborated in the 1960s, when Westland started licence production of the Agusta AB47, better known as the "Sioux".

AgustaWestland's civil rotorcraft include the A119 Koala; the A109 Power and Power Elite; and medium transports AB412, AB139, and BA609 Tiltrotor. Military aircraft include the multi-role Super Lynx 300; the light utility A109 LUH; the 10.6-ton NH90; the medium-lift EH101; and the US101, which will be the new US presidential helicopter. AgustaWestland also produces the Apache helicopter under license from Boeing.

The company's industrial capability comes from specialist centres producing key helicopter segments linked to integration lines situated in Vergiate, Italy, Yeovil, UK, and Philadelphia, USA, which are responsible for final assembly, flight test and delivery. It participates in a number of joint ventures and collaborative programmes with major European and American helicopter primes and is represented around the world by subsidiaries and joint ventures including: AgustaWestland Inc., Agusta Aerospace Corporation and Bell/Agusta Aerospace Company in the USA; Agusta Aerospace Services and EHI Ltd in Europe.

In summer 2006 the company employed 8,530 people had a production value of 33,170 m (€2,490 m), and an order backlog valued at 9,410 m (€7,397 m) with future orders of 4,725 m (€3,712 m).

CONTACT:AgustaWestland Italy , Via Giovanni Agusta, 52021017 Cascina Costa di Samarate (VA) Italy Web: www.agustawestland.com

# BOEING COMMERCIAL AIRCRAFT GROUP

In 1996, Boeing's Commercial Aircraft division (BCA) and General Electric (GE) created a 50/50 partnership to create the Boeing Business Jet (BBJ) company. The BBJ series is built on factory conversions of Boeing's 737NG airliners for the corporate jet market, BCA is based in Renton, Washington and is a unit of The Boeing Company.

It is the world's largest manufacturer of civil aircraft as measured by total sales revenue (2005), but the second-largest civil aircraft manufacturer in total aircraft orders after Airbus. As the largest exporter in the US, Boeing's stock is a component of the Dow Jones Industrial Average.

Around 90 BBJs are currently in service, with approximately 35 percent based in North America and 65 percent based in Europe, Asia/Pacific, Africa, Latin America and the Middle East.

Almost all versions of Boeing's commercial airliners are in use as corporate jets, often for presidential or VIP transport. These range from the popular B727, a few remaining B707s, up to the ultra large B747-400s.

CONTACT: Boeing Business Jets, P.O. Box 3707, MC 1E-77 Seattle, WA 98124-2207US Web: www.boeing.com /commercial/bbi

## BELL HELICOPTER

USA based Bell Helicopter Textron helicopter and tiltrotor manufacturer is headquartered in Fort Worth, Texas. The company manufactures military products in the US, predominantly at its sites in at Fort Worth and Amarillo, Texas, and commercial products in Mirabel, Quebec, Canada.

Bell was a former fixed wing manufacturer and produced the famous Bell X-1, which, was the first aircraft to fly faster than the speed of sound in level flight, flown by Chuck Yeager. The company has a close association with AgustaWestland with a partnership dating back to separate manufacturing and technology agreements with Agusta and Westland. When the two European firms merged, the partnerships were retained, with the exception of the AB139, which is now known as the AW139.

In addition to its commercial helicopters, which can be configured for VIP transport, Bell is developing a tiltrotor the BA609 in conjunction with Italian company Agusta. The dual company flight-tests for the aircraft supports dual production line plans for both manufacturers.

Bell Helicopter is owned by Textron Inc, a \$10 billion multiindustry company which also owns Cessna and Lycoming. CONTACT: Bell Helicopter, 13901 Aviator Way, Fort Worth, Texas, 76177 US Web: www.bellhelicopter.textron.com

## BOMBARDIER AEROSPACE

A subsidiary of Canada's Bombardier Inc., Bombardier Aerospace took over the Canadian government-owned Canadair aircraft manufacturing company after it had recorded the largest corporate loss in Canadian business history. The manufacturer then added de Havilland Canada from Boeing and the bankrupt Short Brothers firm and Learjet. Bombardier's aerospace arm now accounts for over half its revenue.

The airframer is the world's third largest manufacturer of civil aircraft behind Boeing and Airbus; the largest regional aircraft producer (Canadair, de Havilland), ahead of Embraer; and trails just behind Gulfstream as the second largest maker of business jets.

The company produces light (Learjet), mid-size (Challenger), and ultra-large/long-range (Global) business jets; CRJ regional jets and Q Series Turboprops; and amphibious aircraft. Bombardier's Aerospace arm also provides military aviation training, pilot and maintenance training, fractional ownership services (Flexjet), charter services (Skyjet), aircraft interior completion, and maintenance, technical support, and parts services.

Bombardier's family of business jets varies from the Learjet 40XR to the top of the range ultra-long range Global Express XRS. The series is divided into the Learjet, the Global Express and the Challenger families. Employing 27,000 staff, the company posted a sales growth of 2.1% at \$15,741m ( $\in$ 12,354m) in 2005. **CONTACT: Bombardier Aerospace, 400 Cote-Vertu Road West, Dorval, Quebec H4S 1Y9, Canada Web: www.bombardier.com** 

# BRITTEN-NORMAN GROUP

Britten-Norman Group (BNG) was formed by John Britten and Desmond Norman in 1955 in the UK and began making the twinengine, 10-seat Islander in 1966 and the three-engine, 18-seat Trislander by the 1970s. BNG also manufactures the militarised Defender 4000, which is a stretched variant of the Islander. All three aircraft are capable of short take-off and landing (STOL) operations and usually used for inter-island hops.

The private company was acquired by B-N Group in 2000 and formed its manufacturing subsidiary Britten-Norman Aircraft Limited in 2002. The company is owned by the Zawawi family from the Sultanate of Oman, making it one of the UK's two last independent commercial aircraft producers.

Britten-Norman has sold more than 1,250 aircraft to customers in 120 countries worldwide and performs maintenance, overhaul and repair work as well as sub-contracted engineering and design work. BNGs only factory is in Bembridge on the Isle of Wight in the UK, although some airframes were assembled under license in Romania.

Many modern Islanders/Defenders have been fitted with turbine rather than piston engines and turbine-Islanders are the only fixed-wing aircraft in use by the British Army. The company posted sales of \$19.7m (€15.5m) in 2005.

## CONTACT: B-N Group Limited, Bembridge Airport, Bembridge, Isle of Wight PO35 5PR United Kingdom Web: www.britten-norman.com

# CESSNA AIRCRAFT COMPANY

Cessna is the world's largest manufacturer of general aviation airplanes, based on the number of aircraft sold. In 2005 the company delivered more than 1,100 aircraft and reported revenues of 3.5 bn ( $\leq 2.85$  bn). The company – headquartered in Wichita, Kansas USA – is celebrating its 80th anniversary during 2007.

Since the company was first created by Clyde Cessna and introduced the cantilever wing to the world, Cessna has delivered some 187,000 aircraft to almost every country around the globe. The global fleet of more than 4,500 Citations is the world's largest business jet fleet.

Cessna is owned by Textron Inc, a \$10 billion company which also owns Bell Helicopter and Lycoming. The company's manufacturing production facilities are located in Wichita, Kansas; Independence, Kansas; and Columbus, Georgia

Its product range includes single engine piston aircraft used by flying schools and GA owner- pilots – indeed over half of the general aviation aircraft flying today are Cessna's – through to the rugged utility aircraft, the Caravans and onto the business jet Citation fleet which ranges from an entry-level jet the Mustang, through to the world's fastest civil aircraft in service, the Citation X.

Cessna has nine Citation Service Centres located throughout the United States and two international Citation Service Centres. CONTACT: Cessna Aircraft Company, One Cessna Blvd, Wichita, KS 67215 USA Web: www.cessna.com

#### DASSAULT AVIATION

French company Dassault Aviation manufactures military, regional and business jets. Named after its founder Marcel Bloch in 1928, the company changed its name when he changed his in 1947. It was renamed Dassault Aviation in 1990.

Traditionally its Falcon family of corporate jets has accounted for most of its sales, but a slowdown in commercial aviation revenues has meant that its military offerings, the Mirage and Rafale jet fighters, account for a significant portion of its income. Dassault has also teamed up with SAFRAN to develop unmanned aerial vehicles (UAVs) and is the prime contractor for joint manufacturer EADS' combat UAVs.

The founding Dassault family still owns 50% of the company with EADS accounting for a further 46%.

A subsidiary of Dassault Aviation, Dassault Falcon Jet began production in 1963 and sells and supports Falcon 50EX, 900DX, 900EX, 7X, 2000, and 2000EX business jets.

The airframer also offers engine maintenance, spare parts and tools distribution, parts exchange, special equipment testing, operational assistance, and pilot, maintenance, and cabin crew training. To date it has produced more than 1,600 Falcon jets.

Dassault Falcon Jet builds its aircraft in France, and then flies them over to its US facilities for exterior painting and interior completions. In 2005 the group posted revenues of \$4,589m (€3,607 m) with \$1,460m (€1,147 m) coming from Dassault Falcon Jet.

CONTACT: Dassault Aviation, 9, Rond-Point des Champs-Elysées, Marcel Dassault, 75008 Paris, France Web: www.dassault-aviation.com

#### EADS SOCATA

EADS owns both Airbus and Socata as well as Eurocopter. The European Aeronautic Defence and Space Company (EADS) is

the second largest aerospace and defence company in the world after Boeing. EADS is a complex merger of DaimlerChrysler Aerospace (DASA, Germany), Aerospatiale Matra (France), and Construcciones Aeronáuticas SA (CASA, Spain), which together form the consortium.

Socata produces piston engined and turboprop general aviation aircraft, including small private and business aircraft. The company also manufactures aircraft structures for other airframers including Airbus, Dassault, Embraer, Eurocopter and Lockheed Martin. The company's flagship turboprop, the Socata TBM 850, received FAA approval in January 2006; six weeks after EASA certified the aircraft.

With over 6,000 aircraft in service worldwide, Socata is one of the leading general aviation manufacturers in the world. Its headquarters and production are located in Tarbes in Southwest France and cover 128 acres, including 861,000 square feet of floor space (80,000 square metres). The company also has premises in South Florida, which are its US headquarters for sales, marketing, spare parts distribution, technical and customer support.

Parent company EADS' largest holding is an 80% stake in Airbus, (at the time of going to press, the other 20% was owned by BAE Systems). Other operations include helicopters (Eurocopter), business and military jets (46% of Dassault Aviation and 43% of Eurofighter), satellites (Astrium), missiles (38% of MBDA), and commercial satellite launch systems (about 29% of Arianespace). The company posted a net income growth of 646% in 2004 with sales of more than \$42,117m (€33,092 m)

CONTACT: EADS Socata, Aeroport de Tarbes-Lourdes-Pyrénées, 65921 Tarbes Cedex 9, France Web: www.socata.com

#### ECLIPSE AVIATION

Eclipse Aviation is the brainchild of successful IT entrepreneur Vern Raburn. In 1998 he founded the company to create the Eclipse 500 Very Light Jet (VLJ), perhaps the best known aircraft from the new category. Eclipse hopes that its 500 will become the backbone of a national air taxi service designed to offer private jet travel to passengers at fares that are competitive with conventional full-fare airline ticket prices. The 500 is the least expensive twin-turbofan business jet in the world, and is designed for high hour/cycle operations. Florida-based DayJet is the company's main fleet customer, with an order of 239 Eclipse 500s.

In July 2006, the 500 received provisional type certification from the Federal Aviation Administration, becoming the first ultralight VLJ to be certified. Using a test fleet of five FAA conforming aircraft, the 500 was certified in more than 1,800 flights and 2,700 flight hours.

Based in Albuquerque, New Mexico, the company employs about 500 people with plans to double that number in 2007. At the time of writing it had secured nearly 2,500 orders worldwide and plans to open facilities in New York and Florida.

Eclipse is owned by investors from the aerospace, automotive, and information technology industries, including an undisclosed holding by Microsoft. In 2005 the company won the US National Aeronautic Association's prestigious Robert J. Collier Trophy for designing and developing its VLJ.

#### CONTACT: Eclipse Aviation, 2503 Clark Carr Loop SE Albuquerque, NM 87106 US Web: www.eclipseaviation.com

#### EMBRAER-EMPRESA BRASILEIRA DE AERONÁUTICA S.A

Embraer, the Empresa Brasileira de Aeronáutica S.A. (Embraer) is a Brazilian aircraft manufacturer producing commercial, military, and corporate aircraft, aircraft components and mission systems for air and ground operations.

Between 1999 to 2001 it was Brazil's largest exporter and is today one of the country's three main exporters. Employing more than 17,000 people worldwide, it has the fourth largest workforce of airframe manufactures (behind Boeing, Airbus and Bombardier), and the third largest annual delivery of commercial aircraft (behind Boeing and Airbus). The company has maintenance and commercial sites in the US and sales offices in France, Singapore and China.

Headquartered in São José dos Campos, São Paulo, Embraer's main production facilities and engineering and design offices are also at the same site. The manufacturer has a production plant in Gavião Peixoto, São Paulo, which boasts a 16,400 feet (5000 metre) runway for flight-testing. The company also sells transport, light attack, and surveillance aircraft, mainly to the Brazilian Air Force.

Embraer was founded in 1969 as a government initiative and privatised on December 7, 1994. In March 2006 the majority of shareholders approved its capital restructuring proposal, which consisted of a simplified capital structure, contributing to enhanced corporate governance practices and transparency standards. Brazil's government pension funds own more than a 20% share.

In May 2005 the company launched two new business aircraft models, a very light jet and a light jet dubbed the Phenom 100 and 300, respectively. The pair join its super mid-size Legacy 600 and a very large jet, the executive version of its E-190, the Lineage 1000. **CONTACT: Embraer, Avenue Brigaderio Faria Lima** 2170, 12227-901 San Jose dos Campos SP, Brazil Web: www.embraer.com

#### EPIC AIRCRAFT

Epic Aircraft is based in Oregon US and is a subsidiary of Aircraft Investor Resources (AIR). It is developing two aircraft types, an all-composite turboprop, which also comes in kit form and a Very Light Jet, the Elite. In June 2006 Epic said it would fly the Elite for the first time at the July's Oshkosh AirVenture show, but was prevented by a US court injunction from doing so because of a dispute over a wing co-developed with UK's Farnborough Aircraft Company Ltd (FACL). As a consequence Epic does not exhibit the Elite anywhere, including websites ( and the reason it is not featured in this book).

The company has a short but turbulent history and filed a countersuit last year against Abu Dhabi's Gulf Aircraft Maintenance

(GAMCO), claiming that GAMCO misappropriated its intellectual property by signing an MOU with FACL without AIR's knowledge. Epic insists that the jet programme is continuing and says the planned jet uses a different wing. The aircraft was to be produced with Tbilisi Aircraft Manufacturing (TAM) in Georgia.

The company also offers a four-place kit aircraft, the AIR IV-PB LT, that home builders can take away to complete. The company has constructed a centre where kit builders can construct their aircraft–using production tooling–at its "Build Facility" in Bend, Oregon, which will double as a manufacturing plant for certified LTs.

The Epic LT will be certified first by Transport Canada, with FAA and EASA tickets shortly after – anticipated for first quarter 2007. The company will also create a duplicate of its production plant in Bend in Alberta, Canada, effectively doubling its manufacturing capacity.

#### CONTACT: Aircraft Investor Resources, LLC, 2121 Redbird Drive, Las Vegas, NV 89134 Web: www.epicaircraft.com

#### THE EUROCOPTER GROUP

The Eurocopter Group is a wholly owned subsidiary of European Aeronautic, Defense and Space Company (EADS) and Europe's largest manufacturer of helicopters. It is now Europe's leading fully integrated aeronautical group, consisting of three entities: the parent company, Eurocopter, the German subsidiary, Eurocopter Deutschland and the third pillar, Eurocopter España.

Eurocopter was formed in 1992 by the merger of the helicopter operations of Germany's DaimlerChrysler Aerospace and French company Aerospatiale Matra. In addition to building a range of military and civilian helicopters, the company offers repair, maintenance, and overhaul services.

Eurocopter's civilian products include the Colibri, the Ecureuil, the Dauphin, and the Super Puma; military models include the Tiger, Panther, Cougar, and NH90.

At the time of writing parent company EADS' largest holding is an 80% stake in Airbus and it is about to purchase the remaining 20% from BAE Systems.

Other operations include turboprops (Socata), business and military jets (46% of Dassault Aviation and 43% of Eurofighter), satellites (Astrium), missiles (38% of MBDA), and commercial satellite launch systems (about 29% of Arianespace). The company posted a net income growth of 646% in 2004 with sales of more than \$42,117m (€33,092m).

CONTACT: Eurocopter, Aéroport International de Marseille, 13725 Marignane, , France Web: www.eurocopter.com

#### EVIATION JETS

In 2003, after three years of research, USA, Ames, Iowa based real-estate developer Matt Eller paid \$441,000 (€346,080) to acquire the intellectual property of bankrupt airframer VisionAire. He went on to found Eviation Jets to create the

EV-20 Vantage Jet, a progressive 8–10 seat, all composite, twin-engine very light business jet. Eller has attracted private investment to help fund the aircraft's certification effort and beyond.

The company acquired all of VisionAire's technical drawings, trademarks, moulds and tooling, as well as a mockup of the original Vantage Jet prototype. The city of Ames helped finance the construction of a \$5 m ( $\in$ 3.9 m) assembly plant, which VisionAire never occupied. The plant was not part of the assets Eller boucht.

Former VisionAire president Tom Stark is now working as a consultant for Eviation and the company has now completed the critical design review of the EV-20 and will soon issue tenders to potential subcontractors to build a prototype. The company is outsourcing parts manufacture and final assembly will happen at Eviation's research and development base in Sao Paulo, Brazil.

The twin-engine, 8-10-seat, all-composite aircraft has 12 years of engineering, design and marketing behind it, including initial concept input by pioneering designer Burt Rutan. CONTACT: Eviation Jets, 235 Alexander Ave, Ames, Iowa 50010 US www.eviationjets.com

#### **EXTRA AIRCRAFT LLC**

Extra Aircraft is headquartered in North America in Lancaster, Pennsylvania, with a manufacturing plant in Germany. Founded in the 1980s by veteran German aerobatic pilot Walter Extra, Extra Aircraft became a US-owned and -operated company in 2003.

Over the years, Extra and his team of engineers have built and certified seven different aircraft.

The product line includes six highly specialized models: the EA-200, EA-300L, EA-300S, and EA-300LP aerobatic aircraft, as well as the EA-400 and EA-500, business and touring aircraft.

One of the world's most successful competitive aerobatic pilots, in 1982 Extra decided to design and build his own aircraft. Extra's Flugzeugbau (Extra Aircraft Construction) revolutionised the aerobatics flying scene and the aircraft still dominate world aerobatic competitions.

The success of Extra's first aircraft prompted him to design a more powerful machine. His next version the EA-260 was the plane that helped produce national titles for aerobatic champions Patty Wagstaff and Klaus Schrodt. In 1988 three pilots flew the EA-300 in the World Aerobatic Championships. Today the 300-series aircraft are mostly carbon fibre and are the only unlimited category planes certified to plus or minus 10 G's.

In 1998 Extra unveiled the EA-400, a six-seat piston aircraft, and now also offers the turbo-prop version, the EA-500. CONTACT: Extra Aircraft LLC, 1935 Fruitville Pike, Lancaster PA 17601-3996 USA Web: www.extraaircraft.com

## FARNBOROUGH AICRAFT COMPANY LIMITED

Farnborough Aircraft Company's (FACL) F1 utility turboprop has had a bumpy history, but is on course to market.

Farnborough Aircraft took over the Farnborough F1 program in 2002, after its creator supersonic car inventor Richard Noble had failed to raise sufficient capital from small investors via the internet. Noble had designed a six seater turboprop composite taxi aircraft, the Farnborough F1, and its associated operating system. He aimed to raise funds by the project via supporters buying merchandise sold online. He also intended to sell the aircraft through the internet.

Farnborough Aircraft reverted to a more traditional business model and it is likely that the Gulf Aircraft Partnership (a link with Gulf Air's GAMCO in Abu Dhabi) will market the airplane worldwide to a variety of potential operators. Rather than providing cash, GAMCO is likely to share risks via investing in a new 100,000-sq-ft composites manufacturing facility.

The Kestrel programme was beset by further difficulties when Farnborough Aircraft (FACL) became involved in a dispute with Oregon's Epic Aircraft Company over intellectual property rights to a co-developed wing. However, the F1 Kestrel single-engine turboprop completed its ferry flight from Bend, Oregon in the USA to Redhill, Surrey in the UK in summer 2006. The nine-sector journey via Goose Bay, Kuujjuaq, Sondrestrom and Reykjavik took just over 30h.

# CONTACT: Farnborough Aircraft Corporation Ltd, Building X92, Cody Technology Park, Farnborough, Hants GU14 0LX UK

Web: www.farnborough-aircraft.com

## GULFSTREAM AEROSPACE CORPORATION

Gulfstream Aerospace Corporation is located in Savannah, Georgia, United States, and has been a unit of General Dynamics (GDAS) since 2001. The first Gulfstream aircraft was the twin-turboprop Grumman Gulfstream I. In 1978, Grumman sold Gulfstream to Allen E. Paulson's American Jet Industries, renaming the company Grumman American.

The company then bought Rockwell's Aero Commander program and completed Gulfstream Aerospace. In 1985, Chrysler acquired Gulfstream with Paulson remaining at the helm and a few years later he bought it back. In 1999 GDAS acquired the company and in 2001, added the Galaxy Aerospace Company from Israeli Aircraft Industries (IAI). Their production lines, located in Israel, are used to co-produce the G100/G150 and G200 with IAI.

The company has manufactured more than 1,500 aircraft for corporate, government, private and military customers worldwide and more than one-quarter of Fortune 500 companies operate Gulfstream aircraft. In addition over 152 government and military Gulfstream aircraft are in service in 35 countries worldwide in a variety of roles, including maritime surveillance, medical evacuation, weather research and astronaut training.

In 1997 the company won the US National Aeronautic Association's prestigious Robert J. Collier trophy for the Gulfstream V. The variant won the award again in another incarnation when the G550 won the prize in 2003. Gulfstream is known for its innovative technology and in September 2001 its Enhanced Vision System (EVS) was the first system of its kind to be certified by the FAA. EVS dramatically improves a pilot's overall situational awareness. Gulfstream has subsequently advanced the technology introducing synthetic vision systems (along with avionics manufacturer Honeywell).

The company is also deeply involved in research into sonic boom suppression. It is preparing to fly a modified GV as a fly-bywire testbed for its next generation of jets.

CONTACT: Gulfstream Aerospace, 500 Gulfstream Road, Savannah, Georgia 31407 USA Web: www.gulfstream.com

#### HONDA

Japanese car maker Honda launched sales of its HA420 HondaJet in 2006 at the US Experimental Aircraft Association's AirVenture show in Oshkosh, Wisconsin in the USA and has set up a new US production company to pursue FAA certification of the VLJ.

Honda Aircraft will be based in Greensboro, North Carolina, at the Piedmont Triad International airport facility where the VLJ has been designed and flight-tested.

Lead designer Michimasa Fujino was appointed president and chief executive of the company, which began operations in October 2006 despite several setbacks. Fujino proposed the HondaJet in 1995 and has spent 20 years developing technology for the car manufacturer's first aircraft.

Production will take place at an as-yet un-named location in the US. Honda Aircraft will oversee marketing as well as sales and product support, which falls under a new partnership with Piper Aircraft, who bring 80 sales and service centres to the table.

Honda and Piper say they are also exploring other areas of alliance in the general and business aviation markets. Honda has been collaborating with engine manufacturer GE on light business jet engines since 2004.

#### CONTACT: Honda Aircraft Company, Piedmont Triad Airport, North Carolina, USA Web: www.honda.com

#### HONEYWELL

Honeywell is a diversified technology and manufacturing company with 40% of its \$29 billion sales coming from aerospace products and services.

Honeywell's aerospace business is headquartered in Phoenix, Arizona, USA and is a leading global provider of integrated avionics, defense electronics, engines, systems and service solutions for aircraft manufacturers, airlines, business and general aviation, military and airport operations.

The company's capabilities rest in supplying sophisticated avionics, flight safety products and systems, propulsion engines, auxiliary power units and wheels and brakes. In recent years it has developed a number of sophisticated safety products such as RAAS, a warning system to stop aircraft runway incursions and synthetic vision systems which allow pilots to see through bad weather.

Honeywell's aerospace products can be found on virtually every type of aircraft in use, in nearly every region of the world.

The company employs more than 100,000 people in 95 countries. 40,000 of them in the aerospace sector.

Contact details: Honeywell Aerospace, 1944 East Sky Harbor Circle, Phoenix, Arizona 85034, USA www.honeywell.com

## PIAGGIO AERO INDUSTRIES

Piaggio Aero Industries is an Italian aircraft manufacturing company and one of the world's oldest aircraft manufacturers. It is composed of two units based in Genoa and Liguria, Italy and two subsidiaries: Piaggio Aero France (Cannes France and Piaggio America (West Palm Beach, Florida). It has 1,450 staff on its payroll.

The manufacturer is primarily owned by, the Ferrari automotive family and its chief executive Josè di Mase, who have a combined stake of 55%, with private shareholders and institutional investors together holding an additional 10% of the company.

In April 2006 Mubadala Development, a wholly owned investment vehicle of the Abu Dhabi government, purchased a 35% stake in the company. The level of Mubadala's investment is thought to be around \$22.4m (€20m). The cash will possibly kick-start development of a new light business jet to join the company's flagship P180 Avanti II twin pusher.

The original P180 was a long time coming to fruition. The aircraft was tested in Italy and the US in 1980 and 1981. A collaboration with Learjet to develop the aircraft was begun in 1982, but ended in 1986, when the prototype first flew. The P180 finally obtained US certification in 1990.

The first 12 fuselages were built in Wichita, with H & H Parts and Plessey Midwest, then flown to Italy for assembly. The company ran out of money in 1994 and the project languished until 1998. The next generation aircraft, the Avanti II is having more success, with a fleet order of 36 aircraft from New Jersey based fractional ownership operator Avantair, which markets the type exclusively. **CONTACT: Piaggio Aero Industries, Via Cabraria, 4, Genova I-16154, Italy Web: www.piaggioaero.com** 

#### PILATUS AIRCRAFT

Privately owned Pilatus Aircraft Ltd is the acknowledged world market leader in the manufacture of single-engine turboprop aircraft and the only Swiss company to develop, produce and sell aircraft and training systems all over the world. It is also licensed to maintain and perform upgrades on a variety of aircraft. Its first aircraft, the SB-2 Pelican took to the air in 1944.

Established in 1939 and headquartered in Stans, Pilatus owns four independent subsidiaries in Altenrhein, Geneva, Broomfield, Colorado (USA) and Adelaide (Australia). There are additional sales offices in England, Malaysia and the United Arab Emirates. Pilatus Business Aircraft, Ltd. in Broomfield, Colorado, was established in 1996. Altenrhein Aviation Ltd and TSA Transairco SA maintenance centres are both fully owned subsidiaries of the Pilatus Group.

The company's aircraft are renowned for their longevity and popularity. The legendary civilian PC-6 Porter was introduced in 1959 and is still in production today along with its successor, the Turbo Porter. 1978 saw the first flight of the tandem-seat PC-7 Turbo Trainer and to date the company has built more than 450 of the type.

Pilatus' history contains some of the most famous names in rugged general aviation products. In 1979, the company acquired British manufacturer Britten-Norman, which produces the hardy Islander and Defender aircraft. It eventually sold Britten-Norman to finance its Pilatus Business Aircraft enterprise. In 1994 Pilatus introduced its most successful model, the turboprop-powered PC-12 multi-purpose aircraft. To date, more than 600 of the type have been built. Its latest aircraft, the PC-21 advanced military, trainer was rolled out in 2002. **CONTACT: Pilatus Aircraft Ltd, P.O. Box 9926371 Stans. Switzerland** 

Web: www.pilatus-aircraft.com

#### PIPER AIRCRAFT

New Piper Aircraft was formed in 1995 to buy key assets of the bankrupt pioneering general aviation player, Piper Aviation. Founded as the Taylor Brothers Aircraft Manufacturing Company in September of 1927, the company filed for bankruptcy in 1930 and William Piper purchased its assets.

Piper, often called the "Henry Ford of Aviation," believed that a simple low-cost private aircraft would flourish, even in the Great Depression. Manufacturing ceased in the mid 1980's, but recommenced in 1995 when the company was acquired by shareholders including US investment firm, American Capital Strategies (ACS). ACS now owns 94% of Piper's voting equity.

New Piper's output includes: trainers (Seminole, Arrow, Warrior III), models designed for personal use (Saratoga II TC, Saratoga II HP, Archer III, Piper 6X, and Piper 6XT), as well as business aircraft (Meridian, Mirage, and Seneca V).

In August 2006 the company dropped the "New" from its name, reverting to Piper Aircraft and announced a partnership with Honda to market the new HondaJet. The firm is evaluating its output. It recently completed an extensive market survey to determine its future project strategy, which will include new products or innovations every year it says. **CONTACT:Piper Aircraft Company, 2926 Piper Drive, Vero Beach, Florida 32960, USA Web: www.newpiper.com** 

#### RAYTHEON AIRCRAFT COMPANY

Raytheon Aircraft Company (RAC) is a subsidiary of the major US military contractor, Raytheon. The firm designs, manufactures, markets and supports Beechcraft and Hawker aircraft for the world's commercial and military markets. The company's headquarters and major facilities are located in Wichita, Kansas, with other manufacturing operations in Salina, Kansas, and Little Rock, Arkansas. The company also has 100 authorised service centres worldwide.

Although RAC accounts for 13% of Raytheon's business, it is likely to be sold during 2007. It lags its competitors on profitability and was hit badly after 9/11 and did not return to profit until 2004. The firm has also suffered as a result of some of its innovative aircraft developments. The Premier I took a long time to perfect, although it now enjoys strong sales. The Hawker 4000, formerly the Horizon, was unveiled in 1996 and only entered into service in 2006.

However, the revamped Beechcraft propeller aircraft is extremely popular and the Hawker 800XP, now 850XP, is the world's best-selling mid-size jet. RAC also markets, produces and supports a whole range of special-mission aircraft for military and governments worldwide. Missionised versions of its King Air series, pistons, and Hawker 400XP and 850XP (and predecessor models) are in service worldwide. Its King Air 350ER offers extended range as well as overland and maritime radars (HISAR and SeaVue) from sister company Raytheon's Space and Airborne Systems business. **CONTACT: Raytheon Aircraft Company, PO Box 85,** 

Wichita Kansas 67201-00854, USA <u>Web: www.raytheonaircraft.com</u>

#### ROCKWELL COLLINS

For more than 70 years, Rockwell Collins has been recognised as a leader in the design, production, and support of communication and aviation electronics for customers worldwide. It operates from more than 60 locations in 27 countries and employs some 17,000 people. The company's 2006 sales will be in the region of \$3.8bn ( $\leq 2.96$  billion)

Its heritage is rooted in the Collins Radio Company formed in 1933. Rockwell International Corporation purchased the Collins Radio Company in 1973. The Collins legacy continued to be fostered under Rockwell's ownership until 2001 when it became an independent company.

Headquartered in Cedar Rapids, Iowa, Rockwell Collins has a balance of commercial and government customers allowing it to maintain stability in a volatile marketplace. Leveraging developments across both markets has helped Rockwell Collins reduce costs, extend product viability, and enhance the capabilities of its systems.

As well as its market-leading activities in the business aviation arena, Rockwell Collins supplies defence communication and electronic solutions to the U.S. Department of Defense, foreign militaries, and manufacturers of military aircraft and helicopters. Products and systems include communication, navigation, and integrated systems for airborne, ground, and shipboard applications.

Its work in the business aviation – and air transport market – includes supplying new and retrofitting avionics and cabin electronics including next-generation information and flight display systems; Cabin information systems; In-flight entertainment systems including live, multiregion airborne TV, audio/video-on-demand, moving maps, real-time e-mail and Internet access, and more.

Going forward the company is well-positioned in five key areas

of high growth potential: including information management – providing "office in the sky" solutions – open system architecture and a next-generation GPS system.

Since 1997, Rockwell Collins has acquired a number of leading aerospace companies including Kaiser, Hughes-Avicom International and Flight Dynamics.

Contact details: Rockwell Collins Inc, 400 Collins Road N.E. Cedar Rapids, IA 52498, USA www.rockwellcollins.com

## SIKORSKY AIRCRAFT CORPORATION

Sikorsky Aircraft Corporation was founded 1923 by a Ukrainian-American aircraft engineer Igor Sikorsky. Sikorsky created the first stable, single-rotor helicopter to enter fullscale production. In 1934 the company was absorbed into what is now United Technologies Corporation (UTC), and remains one of the world's leading rotorcraft producers.

Its output includes the UH-60 Black Hawk used for troop assault, combat support, special operations, and medevac operations; and the Seahawk, used for submarine hunting, missile targeting, anti-surface ship warfare, and search and rescue. It also makes experimental types like the Sikorsky X-Wing. The company also collaborated with Boeing on the Comanche attack/scout helicopter, designed to utilise stealth technology, but the army cancelled the programme. Civil products include the S-76 and S-92, which are used for rescue, offshore oil, hospital, and corporate use.

Sikorsky supplied the US Presidential helicopter, Marine One, between 1957 and 2005, but in January 2005 the government selected Lockheed Martin's AgustaWestland EH101 as a replacement, which caused an outcry in Sikorsky's home state of Connecticut.

UTC recently acquired Schweizer Aircraft Corporation, which is now a subsidiary of Sikorsky. The product lines of the two firms dovetail, as Sikorsky concentrates on medium and large helicopters, while Schweizer produces small helicopters, UAVs, gliders, and light planes.

The firm's main plant and administrative offices are in Stratford Connecticut. It has other facilities in West Haven, Shelton, and Bridgeport in Connecticut; West Palm Beach in Florida and Troy in Alabama. It also has branches all over the world.

CONTACT: Sikorsky Aircraft Company, 6900 Main St., Stratford, CT 06614, USA Web: www.sikorsky.com

# SINO SWEARINGEN AIRCRAFT CORPORATION

Sino Swearingen Aircraft Corporation (SSAC) was founded in 1999 and is backed by the Taiwanese government. Originally started as a partnership between Swearingen Aircraft Corporation of San Antonio and Sino Aerospace Investment Corporation of Taiwan, the firm was incorporated in 1999. The company was formed to develop, build and market the SJ30 business jet.

The company's headquarters and manufacturing and final

assembly facility is located at San Antonio International Airport, Texas. A large static test facility lies across the field. Additional main wing and fuselage manufacturing facilities are based at the John D. Rockefeller IV Technology Centre on the airport in Martinsburg West Virginia.

SSAC also has a marketing facility at Orange County Airport in Southern California. The company has employed 400 people, but recently had to lay off 140 staff whilst it ramped up rate tooling for the SJ30 production process. However, SSAC expects to reach its target of delivering 100 aircraft a year by 2010.

In July 2006 the SJ30 established world speed and range records for a light business jet by flying from its US base in San Antonio, Texas to Farnborough,UK, in 10h 24min, including a 42min refuelling stop at Goose Bay, Canada.

CONTACT: Sino Swearingen Aircraft Corporation, 1770 Skyplace Blvd., San Antonio, TX 78216 Web: www.sj30jet.com

## SPECTRUM AERONAUTICAL LLC

California based Spectrum Aeronautical LLC designed a very light let (VLJ), the Spectrum 33, using a revolutionary graphiteepoxy construction process, giving it virtually the same size cabin as popular eight to nine seat light business jets, but at less than two-thirds of the weight.

CEO Linden Blue, formerly of Beech Aircraft, embarked on the programme, a surprise late entrant into the VLJ market, in 1995. The Spectrum 33 was unveiled at the US National Business Aviation Association convention in Orlando, Florida in 2005 and made its first flight from Spanish Fork the following January.

For the past twenty years Blue has been working with the principals of Rocky Mountain Composites (RMC) to develop the techniques necessary for building lighter airplanes out of advanced composites that are within economic reason. Over the last few years they had succeeded in demonstrating disruptive new technologies making these objectives a reality.

However, the future of the Spectrum 33 programme suffered a major setback with the fatal crash in July 2006 of the only version of the proof-of-concept aircraft at an airport near Spanish Fork, Utah.

The test pilots Glenn Maben, Spectrum's director of flight operations, and Nathan Forrest, the company's vice-director, were both killed in the accident.

The aircraft rolled right immediately after takeoff, reaching a 90 degree angle before the wingtip struck the ground. Preliminary US National Transportation Safety Board reports indicate that the control linkage had been incorrectly connected during maintenance after the previous flight.

Blue and his team are now committed to refocusing their efforts to bring the program back on schedule.

CONTACT: Spectrum Aeronautical, LLC, 120 Birmingham Suite 110E, Cardiff by the Sea, CA 92007, US <u>Web: www.spectrum.aero</u>